REMARKS

This responds to the Office Action mailed on January 25, 2006, and the references cited therewith.

Claims 1, 12, 17 and 23 are amended, no claims are canceled or added; as a result claims 1-33 remain pending in this application.

Examiner Interview

The Examiner is thanked for his useful comments during the Examiner interview held on April 10, 2006. In response to the Examiner's comments, the Applicant has amended the claims as set out above.

§112 Rejection of the Claims

Claims 1-33 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Applicant submits that the subject matter of the claims is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

In order to clarify the claimed "intended output sample rates" the words "interpolation equation" have been added to the independent claims.

In particular, claim 1 has been amended to include the limitation of:

by converting said input sample rate associated with said input signal to any one of the plurality of differing intended output sample rates by interpolation with an interpolator

implementing an interpolation equation and having associated therewith a second transition band...

Claim 17 has been amended to include the limitation of:
by converting said input sample rate associated with said signal to any one of the plurality of differing intended output sample rates by interpolating a subset of data points of said plurality of data points with an interpolator **implementing an interpolation equation** and having associated therewith a second transition band...

An example of such **an interpolation equation** is provided on page 13 of the application as filed:

$$y_m = w_{k-N/2+1}C_0(f) + w_{k-N/2+2}C_1(f)) + \ldots + w_{k+N/2}C_{N-1}(f)$$

where y_m is the output sample interpolated at the fractional sample period f beyond sample k of signal w (i.e. m = k+f), and $C_i(f)$ is one of N coefficients which are computed by linearly interpolating from two values obtained from a table containing the impulse response of the FIR filter associated with the interpolator which has been designed to have the desired transition band width, passband ripple and stopband rejection characteristics.

Evaluating the given equation at values of k and f corresponding to time values for differing intended output sample rates will clearly result in an output sequence Y_m corresponding to the intended output sample rates. In view of the above it is submitted that the specification *does* reasonably convey that the differing output sample rates are "intended" output sample rates, as is delimited in each of the independent claims.

From the above example equation it is also submitted that the specification provides basis that the "different sample rate is controllably variable at any output data sample by interpolation utilizing an interpolation equation." The words "interpolation

equation" have also been added to the independent claims 12 and 23 in order to clarify the claimed different sample rate is controllably variable/varied at any output data.

It will be noted that "Fig. 10 is a flowchart describing steps for converting a signal to differing sample rates using the processing system shown above in Fig. 5 to produce the sample rate converter shown in Fig. 6" (see brief description of the drawings on page 13). Further, on page 13 of the applicant's application it is stated that "[t]he ROM 506 stores information necessary to enable the signal processing system 500 to operate at differing sample rates while reducing the computational complexity to achieve the same. To that end, ROM 506 stores information that is operated on by host processor 502 or digital signal processor 520 to function as a sample rate converter capable of conversion by a rational, irrational or time varying ratio R. The ratio R is approximated by a rational value L/M, where L and M are integers that can slowly change with time."

In view of the abovementioned example equation and the description of Fig. 10, that it would be clearly evident to a person skilled that the specification describes a sample rate that is controllably variable at any output sample rate by interpolation.

Claims 17-33 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness and failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner is thanked for his useful comments in the Office Action regarding claims 17-33. It will be noted that claims 17 and 23 have been amended and it is submitted that this rejection has also been overcome.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at 408-278-4041 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date April 24, 2006

By _____
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I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

Dawn R. Shaw
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